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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/694,578

10/27/2003

Takehiro Nishimura

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3752

4743

7590

07/27/2005

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EXAMINER

LE, MARK T

ART UNIT

PAPER NUMBER

3617

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/694,578	Applicant(s) NISHIMURA, TAKEHIRO	
	Examiner Mark T. Le	Art Unit 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 7-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    c) ☐ None of:
- 1: ☐ Certified copies of the priority documents have been received.
- 2: ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- 3: ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. This communication is responsive to the amendments, filed on July 7, 2005.

Applicant's amendments and remarks have been carefully considered.

2. In claim 9, line 2, "axel" is a typo. Correction is required.

3. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwamura (US 5,189,962) in view of Kato (US 4,842,818).

Iwamura discloses a radius arm type truck similar to that recited in the instant claims, including base frame 12, axle box 3, radius arm 3', and coil spring 6. It is noted that the coil spring of Iwamura does not have tapered end portions as recited in the instant claims.

Applicant should consider the coil spring of Kato that includes constant diameter wire portion (a) in the middle portion of the spring, and tapered end portions (b) in the end portions of the spring, as shown in Figure 1 of Kato.

In view of Kato, it would have been obvious to one skilled in the art to substitute a coil spring having a construction similar to that taught by Kato for the coil spring of Iwamura so as to enhance operational flexibilities and performance characteristics of the associated structure.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 7 above, and further in view of Pointer (US 2,361,496).

Regarding the instant claimed spring seats with elastic members, consider spring seats with elastic members 30 of Pointer. In view of Pointer, it would have been

obvious to one skilled in the art to provide elastic members, similar to that taught by Pointer, on spring seats of Iwamura so as to achieve expected advantages thereof.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 7 above, and further in view of the prior art description on page 3 of the instant specification.

Regarding the instant claimed truck including a current collector for receiving power from a third rail, it is noted that such feature is known in the art as described on page 3 of the instant specification. Accordingly, it would have been obvious to one skilled in the art to provide a known type of current collectors on the truck of Iwamura so as to allow the truck to be used on the type of tracks with third rails.

6. Responses to Applicant's Arguments:

Applicant should consider spring structure of Kato that is made with a constant diameter middle portion (a) and reduced diameter tapered portions (b) as shown in Figure 1 of Kato, and the spring of Kato in a load and flexure relationship as comparing to that of a conventional constant diameter spring, as shown in Figure 2 of Kato, and when a spring similar to that of Kato is employed in the structure of Iwamura, as set forth above, the spring would inherently has all the characteristics as broadly recited in the instant claims. Furthermore, Applicant should note that the word "corresponds" used in the second line of the last paragraph of claim 7 is merely a relative term; therefore, the degree of preciseness in the comparison may be relative in interpretations. Regarding the instant claimed common load state being any state between the empty state and full passenger state of the vehicle, as recited in claim 7,

appears to suggest that any load state or non-load state is readable as a common load state. Regarding the instant claimed common load state being a substantially fixed-number passenger state, as recited in claim 8, appears to suggest that a load or non-load state including any fixed number of passengers (0 to max) is readable as a common load state. Accordingly, the structure of Iwamura, as modified in view of Kato, inherently has spring characteristics fall within the instant claimed ranges that appear to cover generally all possibilities of load conditions.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark T. Le whose telephone number is 571-272-6682. The examiner can normally be reached on Mon-Fri (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark T. Le  
Primary Examiner  
Art Unit 3617

mle  
3/18/05